

by means of the procedure referred to in the description of the starch product utilized in Example I.

Starch	GSP	Parts of +20 material in Part A	Parts of +20 material in Part B
Corn starch crosslinked with 0.05% epichlorohydrin.....	17.0	3.3	2.5
Corn starch crosslinked with 0.30% epichlorohydrin.....	7.9	0.2	Trace
Wheat starch crosslinked with 0.05% epichlorohydrin.....	17.7	2.9	2.0
Wheat starch crosslinked with 0.50% epichlorohydrin.....	6.9	0.2	Trace

The above data clearly indicates the excellent pulpy textured products resulting from the use of the specified amylose containing, pregelatinized, crosslinked starches. It also illustrates the necessity for carefully controlling the concentration of the crosslinking agent so as to be able to maintain the GSP within the range necessary for attaining optimum results.

EXAMPLE IV

This example illustrates the use of a number of different crosslinked starches in the preparation of the tomato sauce product of Example I.

Thus, in several repetitions of the procedure of Example I, a number of different crosslinked, pregelatinized starches were substituted for the epichlorohydrin inhibited, drum dried corn starch which was used in the preparation of the tomato sauce of Example I.

The starches employed were:

(1) A corn starch which had been mildly inhibited, according to the method of Example II of U.S. Patent No. 2,500,950, with 0.01%, by weight, of epichlorohydrin so as to obtain a product having a GSP of 26.4.

(2) A corn starch which had been mildly inhibited, according to the method of Example II of U.S. Patent No. 2,500,950, with 0.15%, by weight, of epichlorohydrin so as to obtain a product having a GSP of 12.1.

(3) A wheat starch which had been mildly inhibited, according to the method of Example II of U.S. Patent No. 2,500,950, with 0.01%, by weight, of epichlorohydrin so as to obtain a product having a GSP of 25.3.

(4) A wheat starch which had been mildly inhibited, according to the method of Example II of U.S. Patent No. 2,500,950, with 0.15%, by weight, of epichlorohydrin so as to obtain a product having a GSP of 11.2.

(5) A corn starch acetylated with 2%, by weight, of acetic anhydride which had been mildly inhibited, according to the method of Example II of U.S. Patent No. 2,500,950, with 0.15%, by weight, of epichlorohydrin so as to obtain a product having a GSP of 13.5.

(6) A high amylose corn starch containing 70%, by weight, amylose which had been mildly inhibited, according to the method of Example II of U.S. Patent No. 2,500,950, with 0.05%, by weight, of epichlorohydrin so as to obtain a product having a GSP of 8.5.

(7) A corn starch which had been mildly inhibited, according to the method of Example 13 of U.S. Patent No. 2,461,139, with 0.70%, by weight, of a 9:1 mixture of acetic anhydride and adipic acid so as to obtain a product having a GSP of 27.0.

(8) A corn starch which had been mildly inhibited, according to the method outlined in column 1, line 58 through column 2, line 30 of U.S. Patent No. 2,328,537, with 0.2%, by weight, of phosphorous oxychloride so as to obtain a product having a GSP of 10.5.

It should be noted that all of the above described starches were then drum dried and pulverized to a mesh size such that no more than 25%, by weight, of the particles were retained on a #12 U.S. Standard Sieve while no more than 60%, by weight, passed through a #100 U.S. Standard Sieve.

The tomato sauces which were produced when using each of the above described starches were of excellent

quality and fully comparable to the tomato sauce described in Example I as regards the appearance and stability of the pulpy texture.

EXAMPLE V

This example illustrates the preparation of additional food products of this invention characterized by their excellent pulpy textures.

A. Tomato sauce containing thickening agent

The following formulation was prepared according to the procedure described in Example I, hereinabove.

	Parts
Tomato paste	177.0
Water	305.2
15 Pregelatinized, crosslinked corn starch (as described in Example I)	10.9
Modified waxy maize starch (thickening agent—as described in Example II)	3.6
20 Sugar	14.5

The resulting tomato sauce exhibited an excellent pulp-like texture.

B. Apple sauce

The following ingredients were used in this formulation:

	Parts
Apple juice	100.0
Lemon juice	0.3
30 Pregelatinized, crosslinked corn starch (as described in Example I)	7.5
Sugar	25.0

The starch and sugar were blended and then admixed with the juice. The resulting mix was heated to 190° F. for a period of 5 minutes and then canned and cooled. Sterilization by retorting was not required, in this instance, since sterilization had been accomplished by the combination of moderate cooking and the low pH level of the food system.

The resulting apple sauce exhibited a unique pulpy texture resembling the natural fibrous fruit.

C. Dessert pudding

A dry blend of 10 parts of pregelatinized, crosslinked corn starch (as described in Example I) and 25 parts of sugar was admixed with 100 parts of whole milk. This mixture was heated to 190° F. for a period of 5 minutes. When cooled, the resulting pasty material provided an excellent pulpy textured pudding product.

D. Baby cereal

The following ingredients were utilized in this formulation:

	Parts
Pitted prunes	10
55 Pregelatinized, crosslinked corn starch (as described in Example I)	7
Sugar	10
Salt	trace
60 Whole milk	100

In this preparation, the solid ingredients were blended and then admixed with the milk. The resulting mix was then heated to 190° F. for a period of 5 minutes. The cereal product resulting from this procedure exhibited an appealing pulpy texture.

Summarizing, it is seen that this invention provides for the preparation of food products characterized by a highly-desirable grainy, pulpy texture.

Variations may, of course, be made in proportions, procedures, and materials without departing from the scope of this invention which is defined by the following claims.

We claim:

1. A process for the preparation of a starch containing food product having a novel grainy pulpy texture, said process comprising the steps of (1) admixing all of the